**Summary of 2014 (3rd Quarter) Fatal Accidents at Coal Mines and Preventative Recommendations**

During the third quarter of 2014, three miners were killed in accidents in the coal mining industry. One miner died in an **Electrical** accident and another miner was killed in a **Machinery** accident. The third miner died as a result of a **Powered Haulage** accident. We need to work together to prevent additional fatalities.

When completed, a detailed investigation report of each fatality is posted on the MSHA website at:

http://www.msha.gov/fatals/fab.htm

Here is a brief summary of these accidents:

**One miner was killed in an Electrical accident.**
A 41-year-old maintenance supervisor with approximately 19 years of mining experience was killed when he came in contact with an energized component inside an explosion proof enclosure. The victim had removed the enclosure's panel cover and was troubleshooting or performing electrical work on the 600 VAC roof bolting machine when he was electrocuted.

**One miner was killed in a Machinery accident.**
A 53-year-old bulldozer operator, with 28 years of experience, sustained fatal injuries when the bulldozer he was operating went over the edge of an approximately 50-foot highwall. The victim was preparing a bench for drilling when the accident occurred.

**One miner was killed in a Powered Haulage accident.**
A mobile equipment operator, with 10 years of mining experience, was killed while operating a mobile diesel can–setter. He was stockpiling pallets to prepare for the extraction of a longwall when he was crushed in the articulation area of the can-setter.

**Best Practices**
Miners do not need to die while working at coal mining operations. These fatalities can be prevented. No miner should die while working. Effective safety and health management programs save lives. Workplace examinations can identify and eliminate hazards that kill and injure miners. Effective and appropriate training helps ensure that miners recognize and understand hazards and how to control or eliminate them.

While some of the specific circumstances of these accidents remain under investigation, here is what we know at this time:

**Electrical Accidents**

**These deaths can be prevented by following well-known precautions:**

- Wear properly rated and well maintained electrical gloves when troubleshooting or testing energized circuits.
- REMEMBER, troubleshooting or testing is the work of locating electrical problems and verifying that proper repairs have been made.
- After locating the electrical problem, and before performing electrical work, open the circuit breaker, and disconnect and lock-out and tag-out the visual disconnecting device.
- Use properly rated electrical meters and non-contact voltage testers to ensure electrical circuits are deenergized prior to performing electrical work.
- REMEMBER, electrical work is the work required to install or maintain electrical equipment or conductors.
- Perform your own lock-out and tag-out procedure and NEVER rely on others to do this for you.
- Install warning labels on a circuit breaker's line side terminals stating that the terminal lugs remain energized when the circuit breaker is open.
- Develop, communicate, and execute a written plan before performing electrical troubleshooting and repair to ensure that safety is maximized for all miners involved in the task.

**Machinery Accidents**

**These deaths can be prevented by following well-known precautions:**

- Be familiar with the work environment. Before beginning work, walk around and check the area. Plan the safest way to move the material and maneuver the equipment.
- Train all employees adequately on the equipment they operate, safe work procedures, hazard recognition, and hazard avoidance.
- Be attentive to changes in ground conditions and visibility. Watch for surface cracks and loose material.
- Keep the dozer blade between you and the edge when operating close to drop offs. Dump loads short of the highwall edge and push one load into another to maintain a safe distance from the edge.
- Maintain all equipment window glass clean and in good repair.
- Maintain a safe distance from the edge of the highwall. Use a spotter or other technology to assist equipment operators when working near highwalls.
- Perform additional checks during the work shift to ensure ground conditions have not changed when the edge of a slope cannot be seen from the operator's position
- Ensure that personnel operating mobile equipment always wear a seat belt.
- Monitor work activities to assure safe work procedures are followed.

**Powered Haulage Accident**

**These deaths can be prevented by following well-known precautions:**

- Do not position yourself in pinch-point areas while a piece of equipment is running. Ensure that equipment operators remain in the confines of the equipment cab while the machine is running.
- Never work or travel in the articulation area of equipment without engaging the steering frame lock or without using another effective means of preventing motion if the lock cannot be used.
- Always preform thorough pre-operational examinations on mobile equipment to identify any defects that may affect the safe operation of equipment before it is placed into service.
- Ensure that equipment modifications are either original equipment manufacturer (OEM) replacement parts or at least meet OEM specifications.
- Ensure that equipment controls are maintained and function as designed.
- Do not depend on hydraulic systems to hold mobile equipment stationary during repairs or maintenance.

Violations of the priority standards identified as **Rules to Live By** continue to play key roles in mine fatalities. While the mine site portion of the fatality investigations have been completed, not all of the violations have been identified, and not all of the associated citations and orders have been issued, it currently appears that violations of the Rules to Live By standards were still involved in several of those fatalities. MSHA's inspectors will be especially mindful of these issues while performing inspections. They will be talking to miners and mine supervisors in mines throughout the country to discuss these kinds of fatalities, and the ways to prevent them.

**Contractors**

No contractor was killed at coal mining operations in the third quarter of 2014. Contractors and mine operators should ensure that contractor employees are properly trained and follow the mine's safety policies and procedures. Contractors and mine operators should coordinate operations at the mine to ensure that safety and health management programs are in place and are effective, all workplace examinations are performed, and safe work procedures are followed.

The importance and value of effective **safety and health management programs** cannot be overstated. A thorough, systematic review of all tasks and equipment to identify hazards is the foundation of a well-designed safety and health management program. Modify equipment, processes, work procedures and management systems to eliminate or control identified hazards. Operators and contractors should create effective safety and health management programs, ensure that they are implemented, and periodically review, evaluate, and update them.

If an accident or near miss does occur, find out why and act to prevent recurrence. If changes to equipment, materials or work processes introduce new risks into the mine environment, address them immediately.

Conducting **workplace examinations** before beginning a shift and during a shift – every shift – can prevent deaths by finding and fixing hazards. All required workplace examinations must be performed and identified hazards eliminated to protect miners.

Providing effective and appropriate **training** to miners is a key element in ensuring their safety and health. Mine operators and Part 48 trainers need to train all miners to recognize the conditions that lead to deaths or injuries and ensure that measures are taken and followed to eliminate hazardous conditions. Training all miners to follow safe work procedures and stay focused on the task they are performing cannot be stressed enough.

Miners deserve a safe and healthy workplace and the right to go home safe and healthy at the end of every shift, every day. Working together makes that happen.